

**REMARKS**

Applicant thanks the Examiner for the careful review of this application. Claims 1-35 were canceled without prejudice. New claims 36-49 were introduced for consideration. No New matter was added. Therefore, claims 36-49 are currently pending in this application.

**REJECTIONS UNDER 35 U.S.C. § 103(a)**

Claims 1-9, 20-27 and 35 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Huang (U.S. Patent No. 6,272,152) in view of Applicant's prior art.

Claims 10-14, 17-18 and 28-29 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Huang (U.S. Patent No. 6,272,152) in view of Applicant's prior art and further in view of Kuwaoka (U.S. Patent No. 6,449,519).

Claims 15-16, 18-19, 22 and 30-34 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Huang (U.S. Patent No. 6,272,152) in view of Applicant's prior art, in view of Kuwaoka (U.S. Patent No. 6,449,519) and further in view of Sueyoshi (U.S. Patent No. 6,233,562).

Huang apparently discloses an audio decoder architecture that perhaps makes use of various component sharing techniques to conserve hardware and reduce implementation cost. In one embodiment, the audio decoder comprises a bitstreamer, a synchronization controller, a first and second decode controllers, a memory module, a data path, and an output buffer. The bitstreamer retrieves compressed data and provides token-aligned data to the synchronization controller and decode controllers. The synchronization controller initially controls the bitstreamer to locate and parse audio frame headers to extract decoding parameters. The synchronization controller initiates the decode controller which corresponds to an identified compression format, and turns control of the bitstreamer and data path over to the selected decode controller. The selected decode controller then controls the bitstreamer to parse the variable length code compressed transform coefficients. The coefficients are passed to the memory module and data path which operate under the control of the selected decode controller to inverse transform the coefficients

and produce digital output audio data. If the inverse transform is successfully completed, the selected decode controller asserts a decode done signal, and control returns uneventfully to the synchronization controller.

Applicant's prior is described in the background section of the specification.

Kuwaoka apparently discloses a harmonic generation circuit that compares audio data supplied from the outside of every sample, detects a top-peak and an under-peak of the audio data on the basis of the comparison outputs, and detects patterns of the comparison output between continuous top-peak and under-peak. The harmonic generation circuit forms an addition-subtraction data corresponding to harmonic depending on the patterns, and supplies the addition-subtraction data to an adder at a timing depending on the patterns. The adder performs an addition-subtraction process for adding/subtracting the addition-subtraction data formed by the harmonic generation circuit to/from the audio data supplied from the outside. In this manner, a harmonic component can perhaps be added to original audio data, and audio data having a wide frequency band can be formed.

Sueyoshi apparently discloses an audio decoding device for decoding coded audio information with multiple channels that includes a coded information memory section for storing the coded audio information. An information transmission section is used for reading the coded audio information stored at an arbitrary position in the coded information memory section. Also included is an audio decoding section for decoding the coded audio information read by the information transmission section and outputting the resultant audio information in accordance with a time axis.

Claims 1-35 were canceled without prejudice and therefore those rejections are now moot.

The amendment was made to expedite the prosecution of this application. Applicant respectfully traverses the rejections of the amended claims and reserves the right to re-introduce

them and claims of an equivalent scope in a continuation application. If the undersigned agent has overlooked a relevant teaching in any of the references, the Examiner is requested to point out specifically where such teaching may be found.

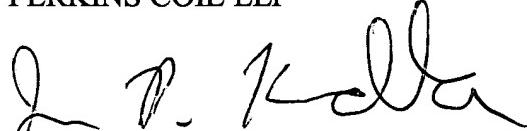
**CONCLUSION**

Applicant believes that all pending claims are allowable and a Notice of Allowance is respectfully requested.

If the Examiner believes that a conference would be of value in expediting the prosecution of this application, he is cordially invited to telephone the undersigned counsel at the number set out below.

Respectfully submitted,

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